

# Progress Report on the Study of Sufficient Funding

Submitted by the EIA and Improvement  
Mechanisms Subcommittee



February 13, 2003

## **Introduction**

On August 15, 2002 the EOC adopted its objectives and critical actions for 2002-03. The second objective was to:

"Define sufficient funding for schools and develop models for shared responsibility between state and local governments.

- ❑ Review professional recommendations for the base student cost and develop a model based on student services
- ❑ Monitor study committees and legislation proposing to amend the current school funding system and advocate EOC critical positions"

Beginning in September 2002 the EOC staff began devising three models for establishing sufficient funding level for South Carolina's public schools. The models are based on current South Carolina statutory and regulatory requirements and on national research on public education funding. The three individual models that are described in the attachment are based on the assumption that public schools would receive sufficient funding to:

1. Provide a level of services in public schools as required by state statutes, regulations and provisos using reasonable cost estimates (State Requirements Model);
2. Ensure that a school district and its student can meet state education standards (Standards-Based Model); and
3. Provide per pupil funding at the national median for per pupil expenditure (National Median Model).

It is the intent of the EOC staff first to receive input from the EIA and Improvement Mechanisms Subcommittee on these models. The EOC will solicit comments from superintendents, principals, and other interested parties. The full EOC will then consider the funding models in July of 2003.

## COMMENTS ON DRAFT COSTING OF STATE REQUIREMENTS

### February 10, 2003

The model is in *draft* form and we anticipate that the model can be refined through public comment and review.

This model is an initial attempt to identify state requirements of districts and schools and reasonable cost estimates for those requirements. The statutes, regulations or Appropriations Act provisos are cited for each requirement and a cost estimate is based upon regional data for salaries; prescribed linkages to the base student cost and estimates from professional organizations.

The district and school enrollments used are the same as those used in the 2000 Augenblick/SC School Boards Association study. These enrollments are fairly close to the 2001 state means: 519 for elementary schools; 577 for middle schools and 900 for high schools.

The estimates focus on the kindergarten through grade twelve programs and therefore do not include state appropriations for the child development program for four-year-olds. The projected cost per four-year-old program participant is \$2,255 for the half-day program, excluding operations and leadership costs at the school or district level.

The estimates do not include funds spent at the state level on behalf of school districts such as transportation and assessment. Nor do the estimates include the costs of state agency operations.

Generally, we estimate the following:

Estimates of Per Pupil Costs of State Requirements			
School Level	Pupils	Per Pupil Cost	Total Cost
Elementary (K-5)	319,830 pupils	\$5,988.66	\$1,915,353,127
Middle (6-8)	162,182 pupils	\$4,981	\$ 807,828,542
High (9-12)	187,330 pupils	\$4,893.20	\$ 916,643,156

#### Gap Between Estimated Costs and Distributions

Estimated total	669,342 pupils	\$3,639,824,825
FY01 audited distributions to districts		\$2,542,393,894
FY03 EFA local shard (30%)		\$ 507,436,800
Gap between estimated costs and distributions		\$ 589,994,131

**PER PUPIL EXPENDITURES IN SOUTH CAROLINA**  
**An Analysis of State Requirements of Schools and Costs**  
**In Statute, Regulation or the Fiscal Year 2003 Appropriations Act as of**  
**December 2002**

REQUIREMENT	BASIS FOR CALCULATION	COST PER SCHOOL*	COST PER PUPIL (across total school enrollment)
	<u>General Assumptions:</u> (a) This model is built upon the following assumed enrollments: Elementary=500; Middle = 750; High = 900 District size is 7500; (b) 46% free/reduced price lunch participation © Most recent available data are used for cost projections. Estimates of pupils in particular programs are taken from median participation rates as published on the 2002 School and District report cards (d) Estimates of teachers needed are rounded to the next highest half of a teacher. Special education teachers are added to the general requirement for teachers.		
SCHOOLS GENERALLY			
Proviso 1.4	Education Finance Act Appropriation Establishing a base student cost of \$2,033 with 0% inflation		
Proviso 1.6	Employer Contributions Appropriation		
59-1-420: Statutory school term of 180 days of instruction; plus ten days for professional development, curriculum planning and opening and closing of schools Distribution of funds established in Proviso 1A.22	Using SE Average Plus \$300, for FY04 (\$40,659), each day costs \$214; data drawn from state salary schedule for teacher with a master's degree and 13 years of experience; fringe benefits: are estimated at 23 %.	Data are used in school level calculations; salary funding is through EFA and EIA salary supplements for teachers  Professional development costs are \$903.04 per teacher based upon state appropriations for local school innovation; arts curricula; critical teaching needs; professional development; NSF; Principal Institute; Institute on Reading; teaching grants and ADEPT. Other program appropriations also permit spending on prof dev but are not included in this calculation	
59-1-440: Instructional day must be at least six hours long	No additional costs, incorporated into teacher salary estimate		
59-1-450 Each school district must offer a parenting family literacy program (R43-265)	Distribution is based upon minimum of \$40,000 to each district and per pupil allocations after that	District allocation \$71,725	\$9.56
59-17-135 Each district must have a character education policy	No cost		
59-19-20 Each district must have a board composed of at least three members	Average compensation per board member is \$ 123.24 per meeting. With three board members and twelve meetings per year, the total cost is \$4436.64 /year.	District Annual Cost \$4,433.64	\$0.59
59-19-45 Each new school district member must participate in orientation	\$8,000 appropriated statewide; annual cost per new board member estimated at \$100. If there is 1/3 turnover per year and a minimum 3-person board; the cost to the state is \$100.	\$100 for prototype district	\$0.01

	<b>BASIS FOR CALCULATION</b>	<b>COST PER SCHOOL *</b>	<b>COST PER PUPIL (across total school enrollment)</b>
59-20-60/R43-261 Each district and school must develop a school renewal/improvement plan and operate a School Improvement Council			
59-24-30 Each administrator must complete an individual professional development plan			
59-24-80 Each new principal must participate in a formal induction program (R43-167)	About 100 individuals participate in the New Principals Academy each year; estimate at 1.2 new principals per district	\$120 for prototype district	\$0.02
59-28-160 Each district/school must provide an orientation and training for all faculty and staff on parental involvement	Cost estimated at \$500 / day for 2-hour training program per school; materials at \$100 per school  Cost estimated at \$275 per school annually	\$275 for prototype district	Elementary: \$0.55 Middle \$0.37 High \$0.31
Proviso !A.35 "Regulation Rollup"	Local School Innovation Program: Estimated distribution of total funds across 670,000 students	\$233,823.64 for prototype district	\$31.17
59-29-30 / R43-238 Courses of instruction with supplementary instruction in alcohol and drug abuse prevention, traffic laws, fire prevention, physical education/ROTC, emphasis on teaching as a profession			Within funding for minimum program
59-32-30 (R43-238) Comprehensive health education: advisory committee and instruction	Estimated at 2 meetings annually with \$100 per meeting for materials and postage	District cost \$200	\$0.03
59-43-161/R43-209 Each school district must employ a chief administrative officer and secretary	Using FY02 Average SC superintendent salary \$104,396) plus 23 % benefits (\$24,011); and administrative support salary of \$38,000 plus 23% benefits (\$8740) NOTE: Many supts receive additional compensation such as an annuity payment.)	Total: \$175,147.00 for prototype district	\$23.35
Original DMP	1 full time fiscal officer and 1 secretary estimated at \$85,721 plus 23% fringe benefits \$19,716 for a total of \$105,436. Salary estimates for SE region from ERS 2001-2002 <i>Salaries and Wages Paid Professional and Support Personnel in Public Schools</i> Secretary wages at \$25,000 plus 23 % fringe benefits \$5,750 = \$30,750	\$136,186 for prototype district	\$18.16

	<b>BASIS FOR CALCULATION</b>	<b>COST PER SCHOOL *</b>	<b>COST PER PUPIL (across total school enrollment)</b>
Original DMP	1.0 Director for planning: \$76,708 plus fringe benefits \$17,643= \$94,351 1.0 Asst. Supt. for Staff, Info: \$80,891 plus \$18,604 fringe benefits 1.0 Program consultant: \$73,129 plus \$16,820 fringe benefits 2.5 secretaries @ \$25,000 plus fringe benefits \$30,750 Salary estimates for SE region from ERS 2001-2002 <i>Salaries and Wages Paid Professional and Support Personnel in Public Schools</i>	\$94,351  \$99,496  \$89,949  \$76,875  Total \$360,671 for prototype district	\$48.09
Original DMP	Instructional supplies  Allocation per staff member for inservice		
Original DMP	Maintenance and operational costs		\$1,291 based upon average statewide costs for operations/pupil
Original DMP	Office support costs (original EFA estimate is \$12 per student, increased by inflation over 25 years)		\$25.62
R43-172	Requires annual financial audit of district and school financial records; average reported by school business officers	\$25,000	\$3.33
	Alternative School; allocation built on 1.74 of bsc (including regular bsc; therefore, for middle schools the impact is an additional 0.74 bsc; and for high schools the impact is an additional 0.49 bsc) Estimated 1 % of student population eligible; for prototype district 75 students	\$122,850 for prototype district	\$16.38
	Technology Initiative- connectivity costs; funds divided by 670,000 students	\$199,650 for prototype district	\$26.62
R43-205.1	ADEPT, including induction year Estimate based upon 125 teachers annually under evaluation in prototype district (1:20 ratio generates 375 teachers evaluated once every three years). Each teacher has three evaluators who spend at least one additional work day on the evaluations @ \$214/day or \$642 plus 23 % fringe benefits (\$789.66)	\$98,707.50	\$13.16
R43-80 : Student transportation	To and from school costs borne by the state.; district salary differential and other travel estimated by school business official		\$185.00
<b>Total to be added to school costs</b>		Elementary	\$1,692.63
		Middle	\$1,692.45
		High	\$1,692.39



	<b>BASIS FOR CALCULATION</b>	<b>COST PER SCHOOL *</b>	<b>COST PER PUPIL (across total school enrollment)</b>
Regulation 43-200 :For reading and mathematics in grades 1-3 the pupil teacher ratio on average must be 21:1	Detailed above with grade level allocation		
59-1-420 5 Additional teacher days provided through Teacher Quality Act of 2000	Addition of five days to teacher contract- using SE Average for FY04, each day costs \$214; fringe benefits: \$1070 plus fringe benefits of \$246.10	\$48,695.00	\$97.39
Proviso 1A.43	\$200 per teacher for instructional supplies; \$31 x \$200	\$6,200.00	\$12.40
Regulation 43-200 : a library/media specialist in schools with more than 375 pupils	1.0 library media specialist times \$40,659 plus 23 % fringe benefits	\$50,010.57	\$100.02
Original DMP	1.0 secretary for each school 0.0 attendance clerk/bookkeeper  Salaries at \$25,000 plus \$5,750 fringe benefits	\$61,500.00	\$123.00
59-139-10 /R43-267 Early childhood intervention (Act 135) applies to grades 1-3	110 students weighted at 0.26 bsc (\$2033). Estimate uses the percentage of students qualifying for free lunch as a predictor of eligibility. Funding per eligible student is \$528.58	\$58,143.80	\$116.28
59-139-10 /R43-268 Academic assistance applies to students in grades 4-5	74 students weighted at 0.114 bsc (\$2033) Estimate uses the percentage of students qualifying for free lunch as a predictor of eligibility Funding per eligible student is \$231.76	\$17,150.39	\$34.30
59-18-160 Parental Involvement: Appoint a faculty contact, provide space, materials and resources	Recommendation from the National Network of Partnership Schools	\$12,500	\$25.00
59-36-50 /Proviso 1.10 services for preschoolers with disabilities	1995 Joint Committee to Study Formula Funding in Education Programs recommended \$3009 per student; current funding is \$1714/pupil. Estimating 4 % of population as eligible; six students would be served; funds distributed in accordance with index of taxpaying ability	\$18,054	\$36.11
59-18-500 (B-D) /R43-240/Proviso 1.57 Summer Schools	Estimated 25% of students scoring below basic in one or more content areas and a summer school allocation of \$450 ; therefore 120 students times \$450. <i>Estimate based on pupil -teacher ratio of 20:1; 30 days instruction, therefore; \$395 for teachers and \$55 for materials, transportation and administration</i>	\$54,000	\$108.00



	<b>BASIS FOR CALCULATION</b>	<b>COST PER SCHOOL *</b>	<b>COST PER PUPIL (across total school enrollment)</b>
R443-220/Proviso 1A.4 :Gifted and talented program incorporates ratio of 1:20 for special school model and 1:15 for resource model,	Estimated 12.6% of students (31.2) in grades 3-5 in program (median for elementary) and student funding level of \$569.24 (.28bsc) Current funding is 65% of cost. State funding includes support for identification , instructional materials and professional development	\$17,760	\$35.52
Education Lottery Appropriations: K-5 Enhancement Program	Funds are distributed with a base of \$25,000 per elementary school and \$75 per pupil addition	\$62,500	\$125
<b>Total for Elementary School</b>			<b>\$5,988.66</b>
<b>R43-264</b> Half-day program for four-year olds	Allocation premised upon one teacher and one assistant to 20 students and a half day program (5 teacher x 190 days x \$214; .5 asst x 190 x \$107) 1.5 teachers, 1.5 assts. for 55 students, plus fringe benefits	\$112,527.00	\$2,255.05
<b>MIDDLE SCHOOL</b>			
Regulation 43-200 :a certified principal in schools with more than 250 students	1 principal at \$ 82,852plus fringe benefits of \$19,055 Salary estimates for SE region from ERS 2001-2002 <i>Salaries and Wages Paid Professional and Support Personnel in Public Schools</i>	\$101,908	\$135.88
Regulation 43-200 an assistant principal or curriculum coordinator in schools over 500 students	1 asst principal at \$68,135 plus fringe benefits of \$15,671 (ERS National Survey of Salaries and Wages In Public Schools, 2001-2002); median for middle schools in this size district	\$83,806	\$111.74
Original DMP	1.0secretary for each school 1.0attendance clerk/bookkeeper  Salaries at \$25,000 plus\$5,750 fringe benefits	\$62,500	\$82
59-18-900 Reporting requirements for annual school and district report card	Fall 2002 Nat'l Conference on State Legislatures estimate: "\$5-10 per pupil" for No Child Left Behind	\$5,625	\$7.50
Regulation 43-200 :a full-time guidance counselor in schools with more than 500 students	1.0 counselor at \$40,659 plus 23 % fringe benefits	\$50,010.00	\$66.68
Regulation 43-200 :two full-time library/media specialist in schools with more than 750 students	2.0 library/media specialists at \$40,659 each plus 23 % fringe benefits	\$100,020.00	\$133.36

	<b>BASIS FOR CALCULATION</b>	<b>COST PER SCHOOL *</b>	<b>COST PER PUPIL (across total school enrollment)</b>
Regulation 43-200 :subject-area certified teachers for more than 90 percent of classroom time Regs provide for 30 students per class; except for students with disabilities	250 students per grade requires 25 teachers  13.% disabled students (98) with an average class size of 12 students requires 8.5 teachers  Total Teachers: 33.5 teachers	\$1,675,335.00	\$2,233.78
	Professional development costs based upon \$903.04 per teacher	\$30,251.84	\$40.34
59-1-420 :5 Additional teacher days provided through Teacher Quality Act of 2000	Addition of five days to teacher contract- using SE Average for FY04, each day costs \$214; fringe benefits: = \$1316 per teacher x 33.5 teachers	\$44,086.00	\$58.78
Proviso 1A.43 Teacher Supplies	\$200 per teacher for instructional supplies	\$6,700.00	\$8.93
5-7-12 and Provisos 1.49 and 1.67 Middle School Initiative	Provides funds to be used for school resource officer, counselor or nurse in middle schools containing at 7 <sup>th</sup> grade; total appropriation divided by 150,000 middle school students	\$25,000.00	\$33.33
59-66-20 School Resource Officers	Allocation at \$20,500	\$20,500.00	\$27.33
Regulation 443-220/Proviso 1A.4 Gifted and Talented Program	Estimated 12.6% of students ( 96 ) in program and a per student funding level of \$569.24	\$56,647	\$113.29
59-18-160 Parental Involvement: Appoint a faculty contact, provide space, materials and resources	Recommendation from the National Network of Partnership Schools	\$18,750.00	\$25.00
59-18-500 (B-D) / R43-240:Summer school	Estimated 25% of students scoring below basic in one or more content areas and a summer school allocation of \$450 (175 students at \$450 each)	\$78,750.00	\$105
59-139-10 /R43-268) Academic assistance applies to students in grades 6-8	Estimated at 345 students weighted at 0.114 bsc (using free lunch participation as a predictor). 46% x 750 students x .114 x \$2033	\$79,958.00	\$106.61
<b>Total for Middle School</b>			<b>\$4,981</b>
<b>HIGH SCHOOL</b>			
Regulation 43-200 a certified principal/director in schools/campuses with more than 250 students	1 principal at \$87,839 plus fringe benefits of \$20,203 (Salary estimates for SE region from ERS 2001-2002 <i>Salaries and Wages Paid Professional and Support Personnel in Public Schools</i> )	\$108,042.00	\$120.05

	<b>BASIS FOR CALCULATION</b>	<b>COST PER SCHOOL *</b>	<b>COST PER PUPIL (across total school enrollment)</b>
Regulation 43-200 :assistant principal/director or curriculum coordinator in schools for each 500 students	2.0 assistant principals or curriculum coordinators : Asst. principal at \$70,485 plus fringe benefits of \$16,212 Salary estimates for SE region from ERS 2001-2002 <i>Salaries and Wages Paid Professional and Support Personnel in Public Schools</i>	\$173,393.00	\$192.66
Original DMP	1.0 secretary for each school 1.0 attendance clerk/bookkeeper  Salaries at \$25,000 plus \$5,750- fringe benefits	\$61,500.00	\$68.33
59-18-900 Reporting requirements for annual school and district report card	Fall 2002 Nat'l Conference on State Legislatures estimate: "\$5-10 per pupil" for No Child Left Behind	\$67,500.00	\$7.50
Regulation 43-200 :2 full-time library/media specialist in schools with more than 750 students	2.0 library/media specialists at \$40,659 each plus 23 % fringe benefits	\$100,020.00	\$111.13
Regulation 43-200 :subject-area certified teachers for more than 90 percent of classroom time	225 students per grade level, requiring the following: 30 teachers  13% students disabled (117) with an average class size of 12 requires 10 teachers  Total Teachers required: 40 teachers	\$2,000,400	\$2,222.67
	Professional Development costs based upon \$903.04 per teacher	\$36,121.60	\$40.14
59-1-420 :5 Additional teacher days provided through Teacher Quality Act of 2000	Addition of five days to teacher contract- using SE Average for FY04, each day costs \$214; fringe benefits: at \$1316 per teacher	\$52,640.00	\$58.49
Proviso 1A43 in General Appropriations Act	\$200/teacher for instructional supplies	\$8,000.00	\$8.89
59-18-160 Parental Involvement: Appoint a faculty contact, provide space, materials and resources	Recommendation from the National Network of Partnership Schools	\$22,500	\$25.00
59-39-100 /Proviso 1.52 Requires 24 units for high school graduation	Requires additional teachers; funds distributed based upon ADM. Estimate uses 200,000 high school students statewide and per pupil allocation of \$119.66	\$107,693.00	\$119.66
59-39-310 Requires driver's education course	Funded at \$30/pupil x 225 students (one grade level)	\$6,750.00	\$7.50
59-66-20 School safety coordinators	Allocation at \$20,500 per school	\$20,500.00	\$22.78
59-139-10/R43-268 Academic assistance applies to students in grades 9-12	Estimated at 414 students weighted at 0.114 bsc (using free lunch participation as a predictor). 46% x 900 students x .114 x \$2033	\$95,949	\$106.61

	<b>BASIS FOR CALCULATION</b>	<b>COST PER SCHOOL *</b>	<b>COST PER PUPIL (across total school enrollment)</b>
R43-258.1/Proviso 1A.3 Allocation for Advanced Placement/International Bacc. Programs	Estimated 9.3 % of students (median) (88 students) in program and a per student funding level of \$100 per exam. Average number of exams per student is 1.65.; therefore 145.2 exams. Districts are allocated \$100 per exam; SDE retains approximately \$300,000 for institutes	\$14,520.00	\$16.13
59-18-350 / Proviso 1.33 Allocations for PSAT/PLAN administration	225 10 <sup>th</sup> graders at \$10 per exam	\$2,250.00	\$2.50
R43-225 School to work program	Implementation of Tech Prep Gov's Workforce Initiative Vocational Equipment Grants (\$4,257,742 and \$9,000,000); projected cost divides appropriations among 189,330 students at the high school grades	\$63,693	\$70.77
R43-240 Summer School	Funds not provided for high school credit courses		
<b>Total for High School</b>			<b>\$4,893.20</b>

Notes: (1) These data are premised upon the following school enrollments: Elementary (K-5) at 500 students; Middle (6-8) at 750 students; and High (9-12) at 900 students. The district enrollment is assumed to be 7500 students

- (2) Calculations of the number of teachers required were rounded up to the nearest half number
- (3) Calculations of the number of special education teacher s required were added to the number of teachers required generally.
- (4) Calculations of the pupil-teacher ratio for special education is based upon a weighted average from the statewide distribution of students with disabilities
- (5) EFA weightings used:
 

Kindergarten	1.30	
Grades 1-3	1.24	
Grades 4-8	1.0	
Grades 9-12	1.25	
<u>Special Programs</u>		<u>Assuming a self-contained ratio</u>
EMD, LD	1.74	15:1 (elementary)
	18:1 (secondary)	
TMD,EH,OH	2.04	12:1
	15:1	
VH,HH, Autism	2.57	10:1
	12:1	
Speech	1.90	
Homebound	2.10	
Prevoc	1.20	
Vocational	1.29	
Early childhood	0.26	
Academic Assist	0.114	

# Standards-Based Model for Funding Public Education

## History of School Finance

One objective of state school finance systems is to remedy per pupil spending disparities between districts. Typically, school districts with greater property tax wealth and greater tax effort can spend more per pupil for public education than property poor districts. To offset the disparities, states allocate more state funds to property-poor districts through a variety of formulas including flat grants, minimum foundation programs, full state funding and percentage-equalizing formulas. Today, about thirty states use foundation formulas.

Since their inception, state school finance systems have been impacted by school finance litigation. School-finance lawsuits first began in California in 1971 and continue today with more than twenty lawsuits pending. The Tennessee Supreme Court decided the most recent state finance lawsuit on October 8, 2002. The Tennessee Court ruled that inequalities in teacher salary compensation across districts result in a substantially unequal educational system for students.

School-finance litigation is both a state and local issue. In 1973 the United States Supreme Court in San Antonio Independent School District v. Rodriguez ruled that the federal government has no role in determining the inequality of a state's school finance system. Each state supreme court must determine the constitutionality of its school finance system based on the state's individual constitution and laws. In the 1980s Kentucky, Montana, New Jersey and Texas debated significant school-finance battles. The issue of school funding is even now becoming a local issue. The city of Los Angeles is facing the first major lawsuit over funding inequities within a district.

How successful have state school finance systems been in correcting the disparities? Recent analysis has shown that school finance systems have been successful in increasing total revenues for public education. However, state school finance systems have not remedied spending disparities between districts known as horizontal equity. Moreover, the focus of school finance litigation has shifted from an issue of equity to one of adequacy.

The 1989 Kentucky Supreme Court ruling in Rose v. Council for Basic Education marked this pivotal shift in the focus of school litigation. Rather than remedying per pupil spending disparities, the litigation focused on school districts providing a substandard quality of education. Concurrent with the Kentucky decision was the standards movement in education. States began to establish academic levels which all students and schools were expected to achieve.

Adequacy rather than equity is now the perceived objective of school finance systems. "Adequacy is contrasted with equity in its focus on the level of dollars and outcomes as opposed to relative differences in fiscal inputs." (Odden and Clune, 1998) The emphasis on outcomes is consistent with the implementation of standards-based education. The goal is to "ensure that school finance policy can facilitate the goal of teaching students to higher standards." (Odden, September 1998) Under an adequacy standards model of school finance, adequacy can be defined as "that level of funding necessary for a school district and its students to meet state education standards." (Heise) The goal is to ensure that the average district/school has sufficient resources to teach the average student to a set level of achievement standards. Additional funding is allocated for additional instruction and support services for students with disabilities, for students in poverty, and for students with limited English proficiency. Adequacy also implies accountability at the school level to monitor outcomes and ensure that the extra aid is directed toward supplementing the education of those who need extra instruction and resources.

Today, national researchers and policy makers are analyzing the issue of school-finance from this new perspective of adequacy rather than equity. Do schools receive adequate funds to guarantee that all students can achieve at the same high standards? And, are schools using the dollars effectively to improve student achievement? Allan Odden, professor of educational administration at the University of Wisconsin-Madison and co-director of the Consortium is conducting the leading research on this issue.

## **I. State-Level**

After performing a review of literature on school finance systems, Dr. Odden has proposed a new system of financing schools using a standards model. This new structure includes a step-by-step process for determining adequate funding and implementation options.

### **Step 1. Establish a base spending level considered adequate for the average child to reach high standards:**

One of three approaches can be used to calculate a base level of spending:

1. **Input approach** -- The input approach identifies the staffing levels and costs in a typical district using statewide average costs to determine a spending level. The problem with the input approach is that the resources levels are not directly linked to actual measures of student performance.

2. **Link spending to a specified level of student performance --** This approach links an adequate per pupil expenditure level to a specified level of student academic performance on a rigorous state test. The approach either identifies the per pupil expenditure level of districts that are achieving the desired student performance on the tests or calculates a cost function that identifies a level of spending per pupil that is sufficient to produce a given level of performance. Adjustments are then made for the socioeconomic characteristics of students in the district including the size of the district. No specific dollar amounts are recommended.
3. **Identify cost of a "high performance" school model --** The final approach is to "identify the costs of a 'high performance' school model – a schoolwide design crafted specifically to produce desired levels of student academic achievement—and to determine the level of spending that would be sufficient to fund such a model." (Odden, September 1998) Two nationally recognized high performance school models are the Modern Red Schoolhouse and Success for All/Roots and Wings program. In his research review Dr. Odden determined that these school design models could be funded with approximately the national median expenditure per pupil. No modifications are made for student characteristics because again, the focus is on finding the adequate spending level for the average child.

Using these three approaches to determine a base student cost, Dr. Odden concluded:

**"When these approaches are applied, it appears that in many states the median would approximate an adequate base level of spending (Odden and Busch, 1998), but in some states, particularly in the South and West, the median would be insufficient. Preliminary research suggests that the national median is the lowest level of current spending that would approximate an adequate spending level."**

**Step 2. Provide additional money for low-income, disabled and LEP students to reach high standards:**

In addition to the base level of spending which is targeted to average students, other students need more academic assistance and resources to achieve the same standards. These students are from low-income families, have disabilities, or possess limited English proficiency. The research does not address the issue of rural.

The research on the cost of educating these students is:

1. An additional \$1,000 per pupil is needed for each low-income student. Dr. Odden determined that the cost of teaching low-income students using a nationally recognized program such as Success for All/Roots and Wings cost \$1,000 per pupil. These programs are designed to address the educational needs of low-income, minority students in urban schools.
2. Across all categories and disabilities, approximately 130% additional funds are needed for students with disabilities. This estimate is based upon Dr. Odden's review of the research literature as well as his own simulation of a school finance system that used a 2.0 weighting for all handicapped students. (Odden and Picus).
3. No definitive research exists to determine the cost of teaching LEP students to high standards. In a simulation of a school finance system, Dr. Odden incorporated a 1.3 weighting for Limited-English-Proficient students.

**Step 3. Adjust the base spending level and all adjustments by a geographic education price index.**

Where needed, Dr. Odden recommends adjusting the base spending level and all adjustments by a geographic education price index. In many states, the purchasing power of education dollars can vary by up to 40% between the lowest and highest price areas within larger states like Florida, Texas and New York. The National Center for Education Statistics publishes price adjustments for counties and school districts in the United States.

**Step 4. Adjust the base student cost annually with an inflation factor.**

Finally, Dr. Odden further recommends annual inflation adjustments to ensure minimum spending levels are stabilized over time.



## School and District Funding

After districts receive their state contributions, Dr. Odden recommends implementing school-finance systems that direct funding to the school level using both lump sums and base allocations per pupil. In his book, Financing Schools for High Performance, Dr. Odden contends that school finance systems that provide more fiscal authority and accountability at the school level will result in sustained, systemic education reform and academic achievement. At the local level, Dr. Odden proposes a finance system based on the premise that the "lack of school authority over the budget is beginning to emerge as one of the key obstacles to effective school restructuring, and school-based financing is a critical element of effective school decentralization." (p. 132)

Dr. Odden recommends a framework for districts to use to design their financing systems:

1. Identifying new district roles and responsibilities in a decentralized system.
  2. Specifying the core district functions and their budget levels and calling the remaining funds the "potential school budget"
  3. Determining the proportion of the potential school budget that would be devolved to sites in a lump sum and how that percentage would increase over time.
  4. Structuring the formula each district must develop to calculate the actual school budget for each school site.
  5. Describing the general type of program budget each school site would be required to develop with its lump-sum budget allocation.
- (p.133)

The core district functions would include expenses related to:

- Building construction
- Technology infrastructure, capital expenditure
- Capital financing
- Board of education
- Office of the superintendent
- Information services, quality benchmarks
- Accountability system
- Individual education plans for disabled students
- Monitoring of federal and state categorical programs

The optional district functions might include:

- Transportation to and from school
- Food services
- Legal services
- Insurance and workers' compensation
- District wide education initiatives
- Federal program services not devolved

Other functions that might be retained by the district within the potential school budget include:

- Business support services including payroll, personnel records; substitute teachers;
- Community service;
- Instructional support for curriculum development, professional development and technological media;
- Pupil support services including counseling psychologists, social workers, health services, nurses; and
- Extracurricular activities and sports

The potential school budget is the sum of all total funds minus the amounts budgeted in the district functions. The potential school budget is less than the actual school budget. Initially, 75 % of the potential school budget would be allocated directly to the school site. Over the next seven years, 2% more each year would be allocated to the school site, resulting in a total of 89%. The actual school budget is allocated to the school on a weighted per-pupil basis. The weights would be different for students in elementary, middle, and high school. Additional add-ons would be for low-income, disabled, limited –English–proficient, gifted and talented, etc. The remaining budget would be allocated based on the building and lands needs, school size, extra provisions for educational needs of severely disabled and other measurable factors.

Below is a sample of a school's budget:

## **SAMPLE SCHOOL BUDGETING FORMULA**

### **Lump Sum**

\$100,000 for elementary schools  
\$150,000 for middle schools  
\$200,000 for high schools

### **Base Allocation per Pupil and Pupil Weights**

Base allocation: \$3,500  
1.0 For grades K, 3-5  
1.2 For grades 1 and 2  
1.2 For grades 6-8  
1.3 For grades 9-12

### **Extra Weights for Special Needs**

0.4 For compensatory education  
1.3 For all categories of disabled students  
0.2 For students with limited English proficiency

### **Special Factors**

Square footage of buildings or land  
Unique school needs  
Special programs for the severely disabled

SOURCE: Financing Schools for High Performance, Figure 6.5, p.157

## **Standards-Based Model Applied to South Carolina Using 2002 Annual Report Card**

The following analysis illustrates how a standards-based model of finance could be implemented in South Carolina.

### **Step 1. Establish a base spending level considered adequate for the average child to reach high standards:**

Using the 2002 annual report card, all elementary, middle and high schools that received an absolute performance rating of either good or excellent were identified. The per pupil expenditures in these schools, the poverty index of the school, and the number of students in the school were analyzed. The mean per

pupil expenditure, mean poverty index, and mean number of students in each type of school results were calculated.

**Excellent or Good Schools  
2002 Annual Report Card Ratings**

<b>School Type</b>	<b>Total Number of Schools</b>	<b>Mean Per Pupil Expenditure</b>	<b>Mean Poverty Index</b>	<b>Mean Enrollment</b>
<b>Elementary</b>	<b>318</b>	<b>\$5,533</b>	<b>51.06</b>	<b>566</b>
<b>Middle</b>	<b>87</b>	<b>\$5,523</b>	<b>40.71</b>	<b>724</b>
<b>High</b>	<b>118</b>	<b>\$5,928</b>	<b>39.94</b>	<b>1100</b>

The per pupil expenditure figure includes local, state and federal revenues. Based on an analysis conducted by the Department of Education of Fiscal Year 2000-01 revenues by district, of the total revenues provided to all school districts in the state, approximately 50.77% are provided by the State. State revenues do not include revenues for State Bond, Barnwell and State Building Funds. Local bond proceeds are also not included in local revenues.

**Fiscal Year 2000-01 Revenues  
To School Districts**

<b><u>SOURCE</u></b>	<b><u>TOTAL FUNDS</u></b>	<b><u>%</u></b>	<b><u>Per Pupil</u> *</b>
Local	2,039,769,500	40.74%	3,147.67
State	2,542,393,894	50.77%	3,923.30
Federal	<u>425,019,906</u>	8.49%	655.87
<b>TOTAL</b>	<b>5,007,183,300</b>		

\* Based on Fiscal Year 2000-01 135-day Average Daily Membership of 648,024.66.

Transforming the base student spending level of \$5,533 to weights and rounding to the nearest hundredth, the results are:

<b>Elementary</b>	<b>1.00</b>
<b>Middle</b>	<b>1.00</b>
<b>High</b>	<b>1.07</b>

Based upon the revenue data from the Department of Education, the base spending level of \$5,533 does include an estimated \$655 per pupil in federal revenues. Reducing the \$5,533 level by the federal contribution results in a \$4,878 spending level from state and local sources. \$4,878 will be defined as the total base spending level for purposes of this analysis.

**Step 2. Provide additional money for low-income, disabled and LEP students to reach high standards:**

To provide additional education services for students who have additional education needs due to socioeconomic status or disabilities, the following add-on weights would be used. These weights are based on national research:

**Poverty .21**

\$1,000 per student or weight of .21 of the \$4,878 base spending level will be allocated for every student who has been eligible for Medicaid over the past three years (same as poverty index figure on report card)

Based on the 2002 annual report card, the mean poverty indices for all schools were:

Elementary Schools	65.62%
Middle Schools	61.20%
High Schools	51.69%

**Disabilities 1.3**

Across all categories and disabilities, approximately 130% additional funds are needed for students with disabilities.

**LEP**

Currently, there is no research to document the additional cost of providing services for limited-English proficient students.

**Step 3. Adjust the base spending level and all adjustments by a geographic education price index.**

In South Carolina there is no evidence of a significant difference in the purchasing power of education dollars between school districts; consequently, no geographic education price index is needed.

**Step 4. Adjust the base student cost annually with an inflation factor.**

Currently, the Office of Research and Statistics annually projects an inflation factor for the EFA by which the base student cost is adjusted. The General Assembly then determines the funding level of the EFA based on the adjusted base student cost and the projected weighted pupil units. The process would continue.

In sum, linking spending to a specified level of student performance, in South Carolina the base spending level and weighting system would be:

	Base Spending Level	Weight	Poverty Add-on Weight	Disability Add-on Weight
Elementary	\$4,878	1.00	.21	1.3
Middle	\$4,878	1.00	.21	1.3
High	\$4,878	1.07	.21	1.3

**What are the costs of such the standards-based model when applied in South Carolina?**

With a base spending level of \$4,878, the total cost of providing a public education system under the Odden model would cost \$4,261,647,214 from state and local sources of revenues. (See Figure 1) This cost estimate is based on the most recent 135-day average daily membership, the percentage of students in poverty based on the 2002 annual report card, and the new weighting system. For purposes of analysis, all handicapped and special needs students were assigned poverty rates of 65.62%, the same percentage as those of students in elementary schools. Vocational students were assigned the same poverty rate as high school students.

Currently, under the EFA, the state is required to contribute 70% of the cost of the foundation program. Applying the 70% level to the analysis, the state would be responsible for \$2,978,562,997 of the total cost of the standards-based model. An additional \$6,557,219 would be provided for the special schools districts. In comparison, state revenues to school districts totaled \$2,808,285,875 in fiscal year 2000-01. The gap between the current funding level and the standards-based model is **\$442,726,322**.

## National Median Model for Funding Public Education

Yet another technique for determining a base student cost is to use the national median for per pupil expenditure as the base student cost.

### Per Pupil Expenditures Based on 2002 Annual Report Card Ratings

<b><u>South Carolina</u></b>	<b><u>Mean</u></b>	<b><u>Median</u></b>
Districts	\$7,218	\$7,072
Elementary Schools	\$5,791	\$5,509
Middle Schools	\$5,999	\$5,469
High Schools	\$6,608	\$6,001
US (1999-2000)	\$6,911	\$6,530

U.S. Source: " Revenues and Expenditures for Public Elementary and Secondary Education: School Year 1999-2000," by Frank Johnson, NCES.  
<http://nces.ed.gov/pubs2002/quarterly/summer/3-7.asp>

If South Carolina was to adopt the national median per pupil expenditure as the base student, the base student spending level would be \$6,530. Again, it is estimated that already \$655 is spend per pupil from federal revenues. Therefore, reducing the \$6,530 by the amount allocated from the federal government results in a base spending level of \$5,875. The mean expenditure for elementary schools would be assigned a weight of 1.00, for middle schools a weight of 1.02, and for high schools, 1.12. An additional \$1,000 for students in poverty would require a poverty add-on weight of .17.

	<b>Base Spending Level at National Median</b>	<b>Weight</b>	<b>Poverty Add- on Weight</b>	<b>Disability Add- on Weight</b>
<b>Elementary</b>	<b>5,875</b>	<b>1.00</b>	<b>.17</b>	<b>1.3</b>
<b>Middle</b>	<b>5,875</b>	<b>1.02</b>	<b>.17</b>	<b>1.3</b>
<b>High</b>	<b>5,875</b>	<b>1.12</b>	<b>.17</b>	<b>1.3</b>



## **What are the costs of using the national median?**

Using the same estimates for the number of students in poverty and applying the new weights and add-ons, the total cost of the national median model is \$5,086,936,453. (See Table 2) Again, if one assumes that the state would pay for 70% of the total cost, the state share would be \$3,556,265,464. Again, an additional \$6,557,219 would be needed to fund the special school districts. For comparison, state revenues to school districts totaled \$2,808,285,875 in fiscal year 2000-01. The gap between the current funding level and the standards-based model is **\$1,020,428,789**.

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				STANDARDS-BASED MODEL							NATIONAL MEDIAN MODEL				
				Figure 1							Figure 2				
					WPUs with		Estimated	Poverty	TOTAL	Total Cost:		WPUs with	Poverty	TOTAL	Total Cost:
Classifications	FY2001-02 ADM	Current EFA Weights	EFA WPUs	New Weights	New Weights	% Students in Poverty	ADM in Poverty	Add-On 0.21	New WPUs	Base Spending Level of \$4,878	New Weights	New Weights	Add-On 0.17	New WPUs	Base Spending Level of \$5,875
Kindergarten	39,451.44	1.30	51,286.87	1.00	39,451.44	65.62%	25,888.03	5,436.49	44,887.93	218,963,310	1.00	39,451.44	4,400.97	43,852.41	257,632,885
Primary (1-3)	126,694.25	1.24	157,100.87	1.00	126,694.25	65.62%	83,136.77	17,458.72	144,152.97	703,178,193	1.00	126,694.25	14,133.25	140,827.50	827,361,565
Elementary (4-8)	225,660.53	1.00	225,660.53	1.00	225,660.53	61.20%	138,104.24	29,001.89	254,662.42	1,242,243,291	1.02	230,173.74	23,477.72	253,651.46	1,490,202,340
High School (9-12)	76,068.99	1.25	95,086.24	1.07	81,393.82	51.69%	39,320.06	8,257.21	89,651.03	437,317,735	1.12	85,197.27	6,684.41	91,881.68	539,804,865
Educable Mentally Handicapped	9,692.70	1.74	16,865.30	2.30	22,293.21	65.62%	6,360.35	1,335.67	23,628.88	115,261,693	2.30	22,293.21	1,081.26	23,374.47	137,325,008
Learning Disabled	40,683.08	1.74	70,788.56	2.30	93,571.08	65.62%	26,696.24	5,606.21	99,177.29	483,786,839	2.30	93,571.08	4,538.36	98,109.44	576,392,985
Trainable Mentally Handicapped	2,680.44	2.04	5,468.10	2.30	6,165.01	65.62%	1,758.90	369.37	6,534.38	31,874,715	2.30	6,165.01	299.01	6,464.03	37,976,152
Emotionally Handicapped	5,483.18	2.04	11,185.69	2.30	12,611.31	65.62%	3,598.06	755.59	13,366.91	65,203,773	2.30	12,611.31	611.67	13,222.98	77,685,035
Orthopedically Handicapped	1,590.65	2.04	3,244.93	2.30	3,658.50	65.62%	1,043.78	219.19	3,877.69	18,915,371	2.30	3,658.50	177.44	3,835.94	22,536,138
Visually Handicapped	614.30	2.57	1,578.75	2.30	1,412.89	65.62%	403.10	84.65	1,497.54	7,305,009	2.30	1,412.89	68.53	1,481.42	8,703,329
Hearing Handicapped	1,112.36	2.57	2,858.77	2.30	2,558.43	65.62%	729.93	153.29	2,711.71	13,227,738	2.30	2,558.43	124.09	2,682.52	15,759,783
Speech Handicapped	34,008.33	1.90	64,615.83	2.30	78,219.16	65.62%	22,316.27	4,686.42	82,905.57	404,413,394	2.30	78,219.16	3,793.77	82,012.92	481,825,930
Homebound	2,268.87	2.10	4,764.63	2.30	5,218.40	65.62%	1,488.83	312.65	5,531.06	26,980,490	2.30	5,218.40	253.10	5,471.50	32,145,077
Vocational 1	54,996.87	1.20	65,996.24	1.00	54,996.87	51.69%	28,427.88	5,969.86	60,966.73	297,395,686	1.00	54,996.87	4,832.74	59,829.61	351,498,959
Vocational 2	21,862.24	1.29	28,202.29	1.00	21,862.24	51.69%	11,300.59	2,373.12	24,235.36	118,220,107	1.00	21,862.24	1,921.10	23,783.34	139,727,126
Vocational 3	10,781.00	1.29	13,907.49	1.00	10,781.00	51.69%	5,572.70	1,170.27	11,951.27	58,298,279	1.00	10,781.00	947.36	11,728.36	68,904,108
Autism	1,051.53	2.57	2,702.43	2.30	2,418.52	65.62%	690.01	144.90	2,563.42	12,504,372	2.30	2,418.52	117.30	2,535.82	14,897,951
Subtotal:	654,700.76		821,313.50		788,966.66		396,835.77		872,302.17	4,255,089,995		797,283.32		864,745.40	5,080,379,234
70% State Share:										2,978,562,997					3,556,265,464
Other Special School Districts *:															
Deaf and Blind										1,016,862					1,016,862
Department of Corrections										2,674,655					2,674,655
Department of Juvenile Justice										2,865,702					2,865,702
Subtotal:										6,557,219					6,557,219
TOTAL State Share and Other Special School Districts:										2,985,120,216					3,562,822,683
2000-01 State Revenues to Districts										2,542,393,894					2,542,393,894
DIFFERENCE:										442,726,322					1,020,428,789
* Based on Department of Education EFA budget request for FY2003-04.															